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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,904	03/03/2000	JOHN R. SNYDER	3220-66107	9526

23643 7590 06/11/2002

BARNES & THORNBURG
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INDIANAPOLIS, IN 46204

EXAMINER

HELMER, GEORGIA L

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 06/11/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/486,904	SNYDER ET AL.	
	Examiner	Art Unit	
	Georgia L. Helmer	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-14 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

OFFICE ACTION

Status of the Claims

1. The Office acknowledges receipt of Applicants Response; dated May 13, 2001, paper number 11.

2. Applicant's substitute declaration, paper number 12, has been entered.

Applicant has amended claims 9, 20-21, and added new claim 24. Claims 9, 10-14, and 20-24 are pending. Claims 9 and 20-24 are examined in the instant action.

This action is made FINAL.

3. All rejections not addressed below have been withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 20-24 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Kilby, NJ et al; (1995) Plant Journal 8: 637-652, in view of Odell et al, US patent #5,658,772, filed 27 July 1994, issued 19 August 1997, and Kilby, NJ et al (1993) Trends in Genetics, 9: 413-421, for reasons of record.

Applicant traverses primarily stating:

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- While Odell teaches a detrimental compound, Odell does not teach a method of expressing a gene encoding for a compound that is detrimental to the plant and is a commercially valuable product that is extracted from the plant.

Applicant's traversal has been considered and is unpersuasive, because

- Odell does indeed teach expression of barnase, a detrimental compound. Barnase is a commercially valuable product because its expression has been shown to produce seedless fruits such as watermelon, which are a commercially valuable commodity. While Odell does not teach extraction of barnase, Applicant is arguing against the references individually. One cannot show nonobviousness by attacking references individually, where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
- Furthermore, Odell extracted RNA and DNA encoding barnase for Northern and Southern analysis for confirmation of proper expression of barnase. It would have been *prima facie* obvious and well within the means of one of ordinary skill at the time the invention was made to extract the barnase expressed by Odell, as extraction of heterologous expressed proteins is routine in the art.

Applicant further traverses that

- While Kilby (1993) teaches the possibility of using similar constructs to study potentially harmful mutations, the methods described by Kilby (1993) are limited to studying the potentially harmful mutations. And that there is no suggestion of

a method of producing a compound by extracting the gene product of the mutation in question.

Applicant's traversal has been considered and is unpersuasive because

- The methods described by Kilby (1993) are specifically mentioned (p420) as encompassing their use for activation or removal of specific genes, and are not limited to studying potentially harmful mutations. Kilby (1995) was relied on for teaching the introduction into plant cells of a DNA construct comprising a promoter, a blocking sequence, and a structural gene, where the blocking sequence is flanked by a pair of directly repeated site-specific recombination sequences, wherein the structural gene is operably linked to the promoter only after the removal of the blocking sequence (Figure 2, page 639).

It would have been *prima facie* obvious and well within the means of one of ordinary skill in the art at the time the invention was made to use the strategy of expressing a biologically detrimental compound only after removal of a blocking sequence.

Accordingly, the rejection is maintained.

Remarks

5. No claim is allowed.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 703-308-7023. The examiner can normally be reached on 8:30 - 5:00.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 703-306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for

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regular communications and 703-308-4242 for After Final communications. All Technology Sector 1 fax machines are available to receive transmissions 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30, (November 15, 1989).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

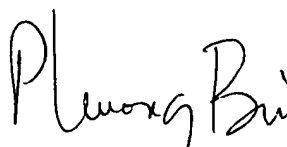
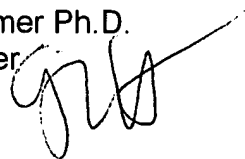
June 7, 2002

Georgia L. Helmer Ph.D.

Patent Examiner

AU 1638

703-308-7023



PHUONG T. BUI
PRIMARY EXAMINER